



4x4 HDMI 2.0 18G Matrix Pro

User Manual
Benutzerhandbuch
Manuel Utilisateur
Manuale

English
Deutsch
Français
Italiano



No. 38247

lindy.com



Tested to comply with
FCC Standards
For Home and Office Use!



Introduction

Thank you for purchasing the 4x4 HDMI 2.0 18G Matrix with audio out. This product has been designed to provide trouble free, reliable operation. It benefits from both a LINDY 2-year warranty and free lifetime technical support. To ensure correct use, please read this manual carefully and retain it for future reference.

Package Contents

- 4x4 HDMI 2.0 Matrix
- 5V DC 3A PSU including multi country adapters
- IR Extension cable
- IR Remote control including CR2025 3V battery
- Mounting brackets, screws & rubber feet
- RS-232 screw terminal
- Quick Install Guide

Features

- HDMI 2.0, HDCP 2.2, DVI 1.0 compliant
- Resolutions up to 4096x2160@60Hz 4:4:4 8bit
- Full 18G bandwidth
- Supports HDR10
- Supports 7.1 channel of LPCM, Dolby TrueHD and DTS-HD Master Audio digital audio signals
- RS232, IR remote control & IP control for switching

Specification

- Input Ports: 4 x HDMI (Female), RJ45 (Female), RS232 (Female), 3.5mm IR (Female), USB Micro B (Female)
- Output Ports: 4 x HDMI (Female), 4 x SPDIF (Female)
- Power Supply: DC 5V
- Operating Temperature: -5°C - 45°C (23°F - 113°F)
- Storage Temperature: -20°C - 60°C (-4°F - 140°F)
- Relative Humidity: 20 ~ 90% RH (Non-condensing)
- Power Consumption: 13W max

Installation

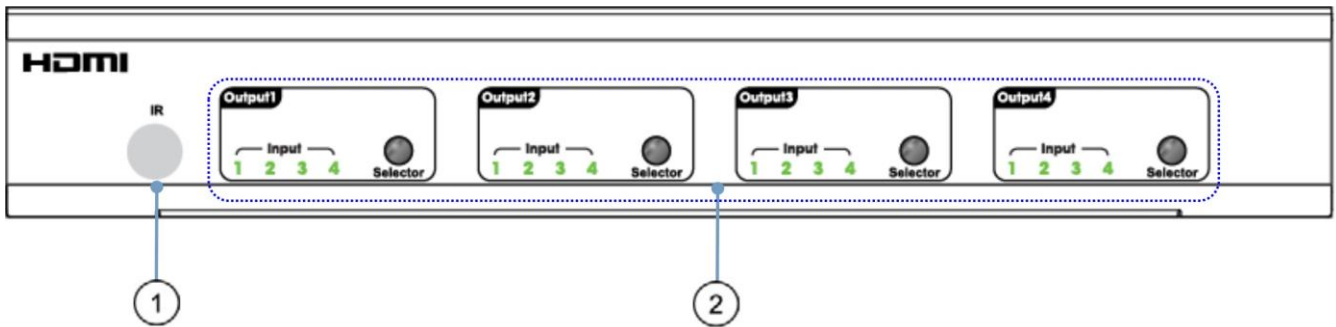
Make sure all devices are switched off before making any connections.

Connect the source devices such as a PC, Blu-ray player or games console to the HDMI matrix input ports. Then connect the high definition displays to the HDMI matrix output ports. When all the connections are made, connect the power supply and switch on.

Once all the connections have been made, switch on the devices in this order: displays, HDMI Matrix, source devices. Please allow a few minutes for the devices to handshake and for the signals to appear.

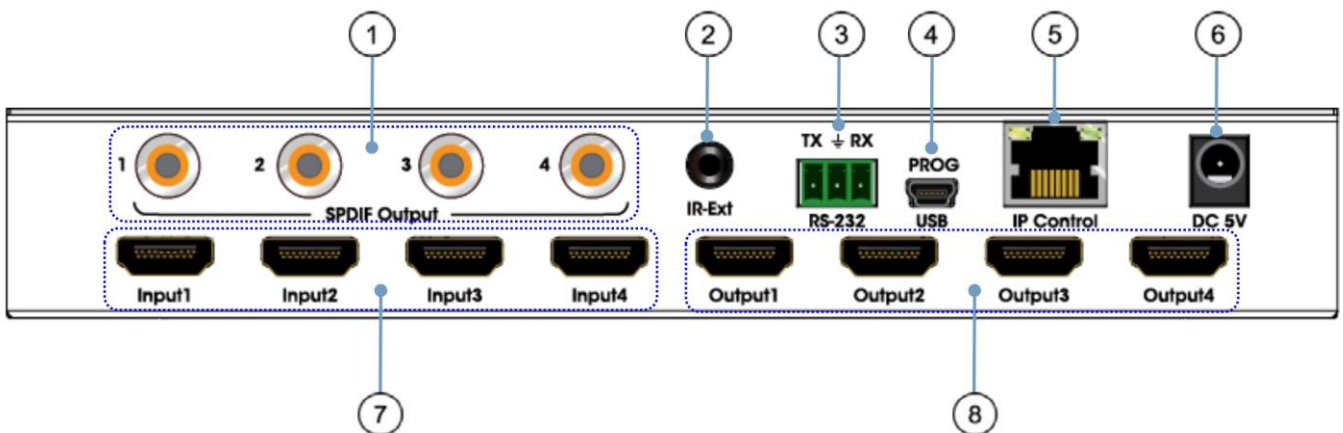
Operation

Front Panel

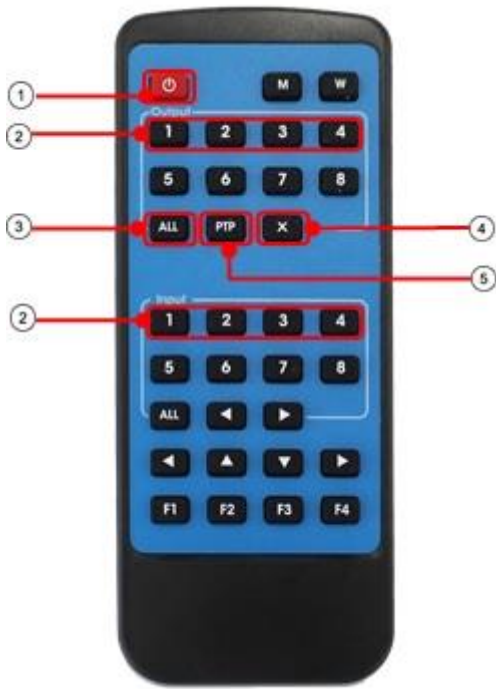


- 1. IR receiver window
- 2. Output Selector – Press the selector button to scroll through inputs 1-4

Rear Panel



- 1. SPDIF audio output ports
- 2. IR extension port
- 3. RS-232 connection port for control or upgrading the firmware
- 4. USB micro B port for upgrading the firmware
- 5. RJ45 port for IP control
- 6. DC power port
- 7. HDMI input ports
- 8. HDMI output ports



Remote Control

1. Power button
2. Output/Input buttons – select 1-4 output then 1-4 input to display a single source to a single display
3. All button – select all then input 1-4 to display one input to all outputs
4. Cancel button cancels the switching operation
5. PTP button – Mirror all inputs to outputs. E.g. input 1 to output 1, input 2 to output 2.....

RS-232 Pin Assignment

Matrix	Remote Control Console	
Assignment	PIN	Assignment
	1	NC
Tx	2	Rx
Rx	3	Tx
	4	NC
GND	5	GND
	6	NC
	7	NC
	8	NC
	9	NC

Software Control

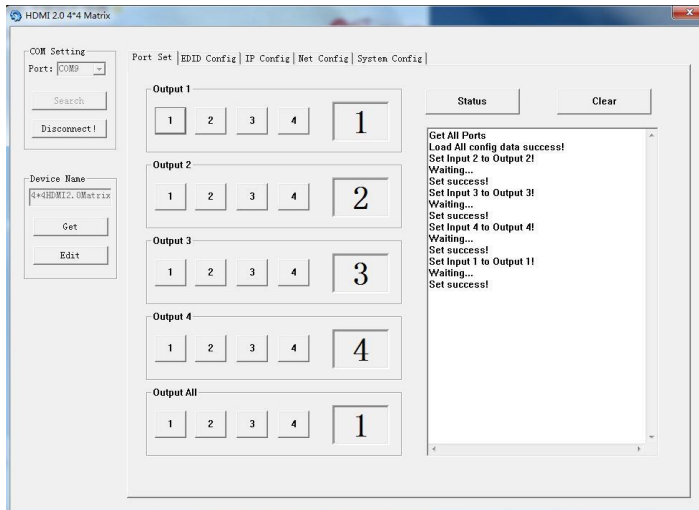
Download the latest version of the control software from the Lindy website.

Using either a RS232 cable or a USB cable, connect the matrix to a PC or laptop.

COM Setting – select and connect to the COM port on your PC

Device Name – You can rename the device using up to 16 characters

Port Set – Select and switch your input and output ports. Click status to display the current connection status, click clear to clear the display information



EDID Config – Read and configure the EDID for each input EDIDs are as followed

Audio EDID

7.1 Channel Audio supports: 24-bit, 192Khz, DTS Audio, Dolby Digital Plus, DTS HD, Dolby Digital and Dolby TrueHD

5.1 Channel Audio supports: 24-bit, 192Khz, DTS Audio and Dolby Digital

2 Channel Audio supports: 16-bit, 48Khz. No audio formats

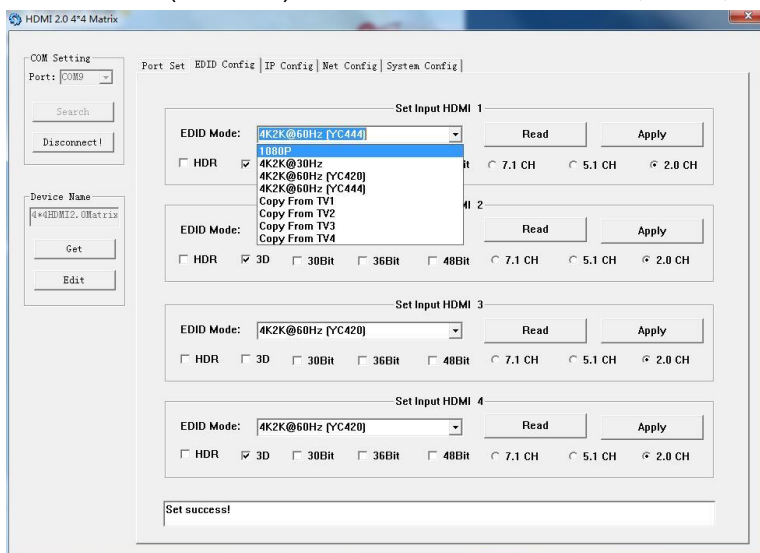
Video EDID

1080P "HDMI Matrix" 1920x1080P, 60Hz, 4:4:4, 8bit

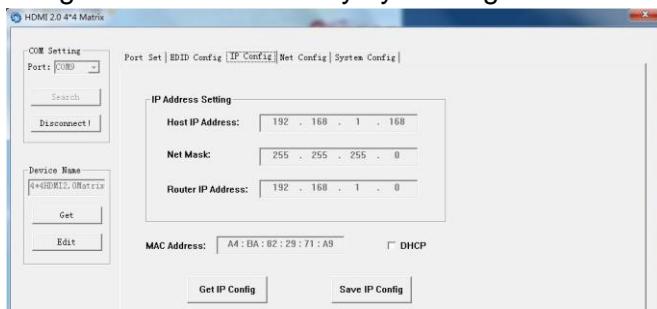
4k2k@30Hz "HDMI Matrix" 3840x2160, 30Hz, 4:4:4, 8bit

4k2k@60Hz(YC4:2:0) "HDMI Matrix" 3840x2160, 60Hz, 4:2:0, 8bit

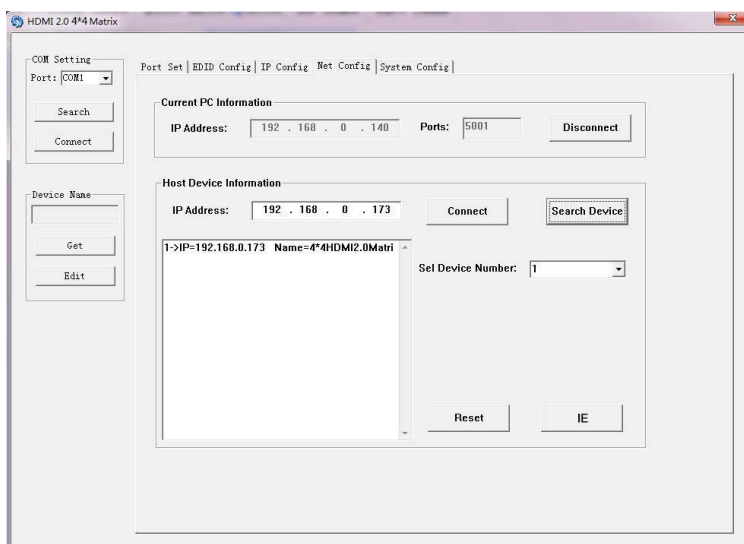
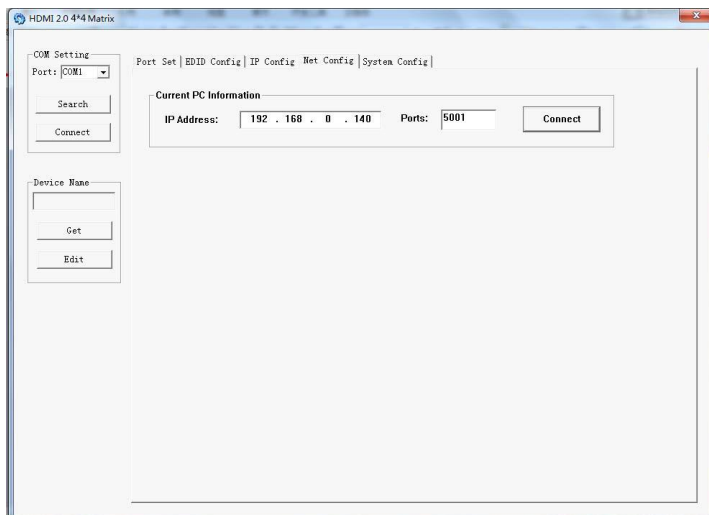
4k2k@60Hz(YC4:4:4) "HDMI Matrix" 3840x2160, 60Hz, 4:4:4, 8bit



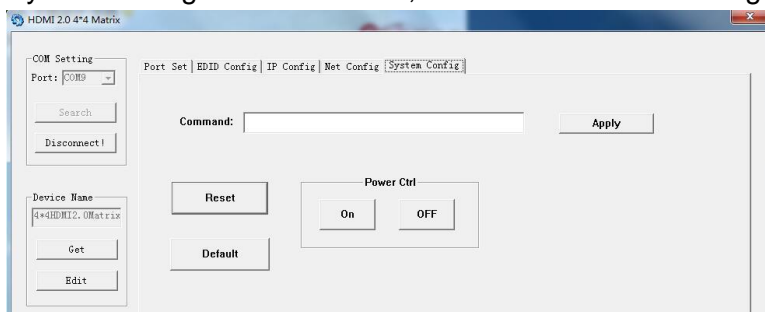
IP Config – You can manually set the IP address and the MAC address, or you can set the router to assign the IP automatically by clicking DHCP



Net Config – Allows you to configure the PC and the Matrix to be in the same LAN. Click “Net config” → “Connect” → “Search Device” → “Sel Device Number” → “Connect” when you can see the device name, it means connection was successful.



System Config – Power On/Off, reset or set default settings



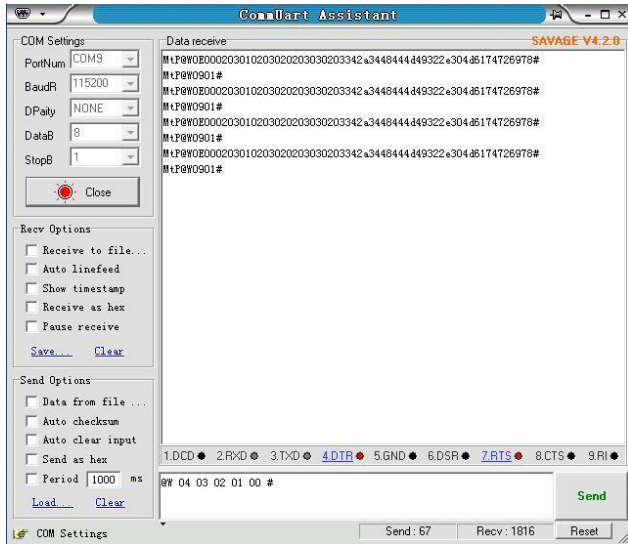
Command Control

Open the application CommUart Assistant

Comport Setting

Baud Rate:	115200 bps
Parity:	None
Data Bits:	8 bit
Stop Bits:	1 bit

Enter the Command in the send options



Command	Function	Note
@W 04 00 01 02 03 #	PTP Function	Mirror all inputs and outputs (Ex. Input 1 to output 1, input 2 to output 2, etc)
@W 50 #	Reboot	
@W 51 #	Restore Factory Setting	
@W 0F 00 #	Standby	00: Standby Mode 01: Cancel "Standby Mode"

Command	Description
00	Output1
01	Output2
02	Output3
03	Output4
04	All Output
00	Input1
01	Input2
02	Input3
03	Input4

E.g.: @W 00 00 #: Output 1 display Input1



EDID Setting

@W XX AA BB #

Parameter Description:

XX for configuration of **“INPUT EDID”**

Command	05	06	07	08
Description	Input1	Input2	Input3	Input4

AA for selecting **“Video Mode”**

Command	00	01	02	03
Description	1080P	4K2K_30	4K2K_60(YC420)	4K2K_60(YC444)

BB for selecting below function

Bit7	Bit6	Bit5	Bit4	Bit3	Bit2	Bit1	Bit0
HDR	48Bit	36Bit	30Bit	7.1CH	5.1CH	2CH	3D
1	1	1	1	1	1	1	1
0	0	0	0	0	0	0	0

“1” : choose the function, “0” : doesn’t choose the function

Please note: HDR and 3D EDIDs are not supported

E.g. 01001000: 48Bit, 7.1CH

Change Binary code “01001000” to hexadecimal format “48”

E.g. @W 05 03 48 #

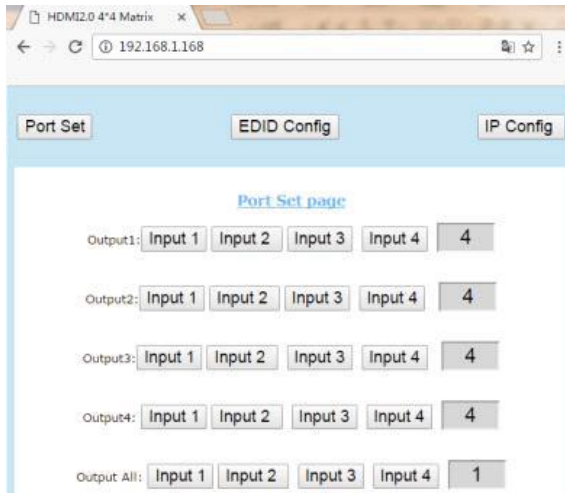
The EDID of input 1 is: 4K2K_60(YC444), 48Bit, 7.1CH

Web Control

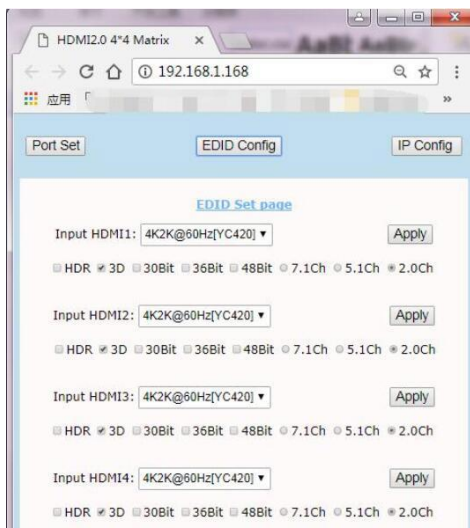
The default IP address of the Matrix is 192.168.1.168. Your PC must be in the same IP range to allow you access to it. For TCP/IP4 you can use and IP address in the range 192.168.1.2 to 192.168.1.254 excluding 192.168.1.168.

Open a web browser and enter the IP address 192.168.1.168

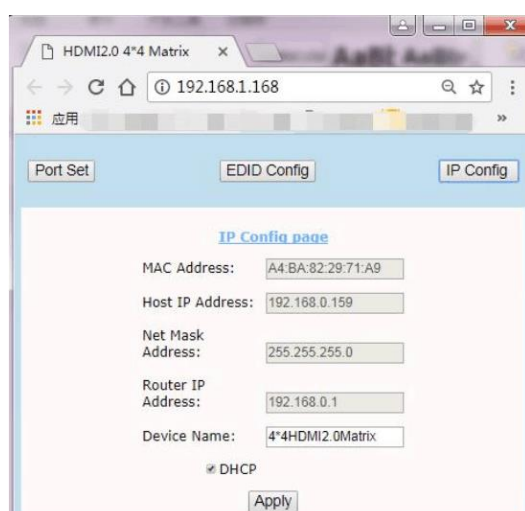
Port Page – Set your Input and Output ports



EDID Set Page – Edit the EDID settings for each input port



IP Config Page – Rename the device and enable/disable DHCP



CE/FCC Statement

CE Certification

This equipment complies with the requirements relating to Electromagnetic Compatibility Standards. It has been manufactured under the scope of RoHS compliance.

CE Konformitätserklärung

Dieses Produkt entspricht den einschlägigen EMV Richtlinien der EU für IT-Equipment und darf nur zusammen mit abgeschirmten Kabeln verwendet werden.

Diese Geräte wurden unter Berücksichtigung der RoHS Vorgaben hergestellt.

Die formelle Konformitätserklärung können wir Ihnen auf Anforderung zur Verfügung stellen

FCC Certification

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

You are cautioned that changes or modification not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. This device must accept any interference received, including interference that may cause undesired operation.

LINDY Herstellergarantie – Hinweis für Kunden in Deutschland

LINDY gewährt für dieses Produkt über die gesetzliche Regelung in Deutschland hinaus eine zweijährige Herstellergarantie ab Kaufdatum. Die detaillierten Bedingungen dieser Garantie finden Sie auf der LINDY Website aufgelistet bei den AGBs.

Hersteller / Manufacturer (EU):

LINDY-Elektronik GmbH
Markircher Str. 20
68229 Mannheim
Germany
Email: info@lindy.com , T: +49 (0)621 470050

LINDY Electronics Ltd
Sadler Forster Way
Stockton-on-Tees, TS17 9JY
England
postmaster@lindy.co.uk , T: +44 (0)1642 754000

Recycling Information



WEEE (Waste of Electrical and Electronic Equipment), Recycling of Electronic Products

Europe, United Kingdom

In 2006 the European Union introduced regulations (WEEE) for the collection and recycling of all waste electrical and electronic equipment. It is no longer allowable to simply throw away electrical and electronic equipment. Instead, these products must enter the recycling process.

Each individual EU member state has implemented the WEEE regulations into national law in slightly different ways. Please follow your national law when you want to dispose of any electrical or electronic products. More details can be obtained from your national WEEE recycling agency.

Germany / Deutschland

Rücknahme Elektroschrott und Batterie-Entsorgung

Die Europäische Union hat mit der WEEE Richtlinie Regelungen für die Verschrottung und das Recycling von Elektro- und Elektronikprodukten geschaffen. Diese wurden im Elektro- und Elektronikgerätegesetz – ElektroG in deutsches Recht umgesetzt. Das Entsorgen von Elektro- und Elektronikgeräten über die Hausmülltonne ist verboten! Diese Geräte müssen den Sammel- und Rückgabesystemen zugeführt werden! Dort werden sie kostenlos entgegen genommen. Die Kosten für den weiteren Recyclingprozess übernehmen die Gerätehersteller.

LINDY bietet deutschen Endverbrauchern ein kostenloses Rücknahmesystem an, beachten Sie bitte, dass Batterien und Akkus den Produkten vor der Rückgabe an das Rücknahmesystem entnommen werden müssen und über die Sammel- und Rückgabesysteme für Batterien separat entsorgt werden müssen. Ausführliche Informationen zu diesen Themen finden Sie stets aktuell auf der LINDY Webseite im Fußbereich.

France

En 2006, l'union Européenne a introduit la nouvelle réglementation (DEEE) pour le recyclage de tout équipement électrique et électronique.

Chaque Etat membre de l' Union Européenne a mis en application la nouvelle réglementation DEEE de manières légèrement différentes. Veuillez suivre le décret d'application correspondant à l'élimination des déchets électriques ou électroniques de votre pays.

Italy

Nel 2006 l'unione europea ha introdotto regolamentazioni (WEEE) per la raccolta e il riciclo di apparecchi elettrici ed elettronici. Non è più consentito semplicemente gettare queste apparecchiature, devono essere riciclate. Ogni stato membro dell' EU ha tramutato le direttive WEEE in leggi statali in varie misure. Fare riferimento alle leggi del proprio Stato quando si dispone di un apparecchio elettrico o elettronico.

Per ulteriori dettagli fare riferimento alla direttiva WEEE sul riciclaggio del proprio Stato.



Tested to comply with
FCC Standards
For Home and Office Use!



No. 38247

3rd Edition, February 2019

lindy.com